Delta Operations for Salmonids and Sturgeon (DOSS) Group Conference call: 1/24/12 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: http://www.swr.noaa.gov/ocap/doss.htm

DWR: Mike Ford, Edmund Yu, Kevin Reece, Andy Chu, James Gleim

FWS: Roger Guinee, Leigh Bartoo, Craig Anderson

NMFS: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart, Garwin Yip

Reclamation: Tom Morstein-Marx

DFG: Bob Fujimura

EPA, **SWRCB**: not present

Agenda

- 1. Fish monitoring
- 2. Current operations
- 3. Annual review comments
- 4. Acoustic tag and joint stipulation workshops 2/3/12 and 2/7/12, respectively

Action Item [11/15/11]

Evaluate the data from Mill and Deer Creek RSTs, Tisdale, and Knights Landing RSTs and compare the timing of spring-run Chinook salmon migration captured by each data set. Carry until we get Mill and Deer Creek data overview from DFG.

Action Item [1/3/12]: Review the DOSS section of the annual review report and provide responses regarding implementation of recommendations. **Carry**

Action item [1/17/12]: DOSS requests that DFG reconcile the database for hatchery fish that fall within the winter-run size category for this year with the tags that are read from the fish facilities. This can be done with a simple feedback loop from DWR with the tag information. **Carry**

Action item [1/17/12]: DWR, Reclamation, NMFS, and DFG will meet to discuss how best to include CWT information in available salvage databases, both going forward and perhaps retrospectively. Bob Fujimura, DFG, agreed to lead this effort and provide a list of what needs to be revised. **Carry**

Fish Monitoring: The following table presents fish monitoring data. Unless otherwise noted, reported sizes are fork length. See:

http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

Location	Chipps Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST
Sample Date	1/17, 20	1/17, 18, 20	1/17, 19, 20	1/18–1/19	1/18, 20, 21, 23	1/18, 20, 22, 23
Total Catch	20	8	0	108	134 (greatly increased from 15 last week)	352
FR		6		86	115	315
WR				2	2	7
SR				20		2
LFR						
Ad-Clipped Chinook	3	1			7	20
DS	16					
Splittail	1					
Longfin						
SH (ad-clip)		1			10	8
SH (wild)						
W. Temp. (avg. °F)	46.9	45.5	45.9	45.5	46.3	45.0
Flows (avg. cfs)					8,040	10,408
Turbidity (avg. NTU)					34.5	41.9
WR/LFR Avg. CPUE					0.19	0.80
FR/SR Avg. CPUE					6.48	36.2

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail, CPUE = catch per unit of effort, ACT = acoustical tag

Fish Salvage Data (1/17 through 1/22) Reports are also posted at ftp://ftp.delta.dfg.ca.gov/salvage: and you can locate the table under folder "DOSS salvage tables" (you can also try http://www.dfg.ca.gov/delta/apps/salvage/Default.aspx) and click on "salvage FTP site.

<u>Chinook salmon¹:</u> Three winter-run-size ad-clipped Chinook were salvaged at the CVP (weekly expanded salvage = 10), but not at the SWP. Late-fall-run size ad-clipped Chinook were salvaged at the CVP (weekly expanded salvage = 7), but not at the SWP. The water-year

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¹ Race of clipped salmon is determined solely by length of the fish at date criteria on date of salvage and should be treated as preliminary and may be subject to change when Reclamation and FWS reports the tag information on race.

(10/1/2011) to present) salvage totals for all races of Chinook at the CVP are 14 ad-clipped (loss = 12) and 19 non-clipped (loss = 13). No Chinook have been salvaged at the SWP this water year. In addition, 5 ad-clipped Chinook were salvaged on 1/23/12 at the CVP; the race is now being determined based on the CWT codes (1 was in the winter-run size range; 4 were in latefall-run size range).

The fish facilities are reading tags in real time now, so we're getting the information directly from the CVP. The SWP is also geared up to read tags in real time. Typically, Chinook show up at the CVP first, and then at the SWP after crossing Clifton Court Forebay. The Livingston Stone National Fish Hatchery is planning on releasing 194,000 winter-run Chinook at Caldwell Park near Redding the first week in February. Note that the triggers in the NMFS BiOp for density-based OMR flow levels are for non-clipped fish only.

Steelhead: No steelhead were salvaged at either facility. The year-to-date salvage totals for steelhead at the SWP are 0 ad-clipped and 8 non-clipped. No steelhead have been salvaged at the CVP this water year. There has been an increase in the number of adult steelhead showing up on the Stanislaus River (38 seen) this year compared with < 10 last year. Nimbus Hatchery (American River) is getting about an average number of adult steelhead this year as well, but we have no details yet.

<u>Delta smelt</u>: One delta smelt was salvaged at the CVP for the first time this water year (weekly salvage = 4), but not at the SWP. The water-year salvage total for delta smelt at the CVP is 4. No delta smelt have been salvaged at the SWP this water year.

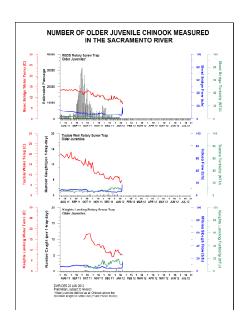
Longfin smelt: No longfin smelt have been salvaged at either facility this water year.

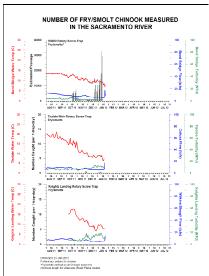
<u>Splittail</u>: Splittail were salvaged at the CVP (weekly salvage = 8) and SWP (weekly salvage = 6) facilities. The water-year salvage total for splittail at the CVP is 186; the water-year salvage total for splittail at the SWP is 3,745.

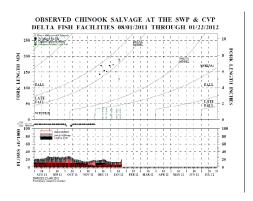
<u>White sturgeon</u>: No white sturgeon were salvaged at either facility. The water-year salvage total for white sturgeon at the CVP is 60; no white sturgeon have been salvaged at the SWP this water year.

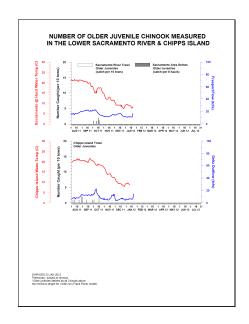
Green sturgeon: No green sturgeon have been salvaged at either facility this water year.

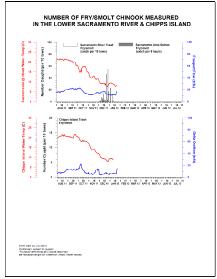
Below are the weekly graphs prepared by DWR (Llaban) for the capture of older juvenile salmon in the Sacramento River and Chipps Island trawls. Also included are graphs of the number of fry/smolts measured at all locations and older juvenile losses from October 2011 through January 22, 2012.

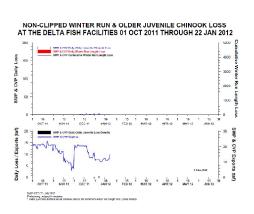












Operations (1/24/12)

	SWP	CVP						
Exports (cfs)								
Clifton Court Forebay	3,500 (to 3,000 on1/25)	Jones Pumping Plant	2,700 (will go to 4 units up to 3,500 on 1/25)					
	Reservoi	r Releases (cfs)						
Feather - Oroville	1,750	American - Nimbus	1,700					
		Sacramento - Keswick	4,000					
		Stanislaus - Goodwin	600					
	Reservoir Storage	(in TAF, % of capacity)						
San Luis ((SWP)	993 (max = 1,062)	San Luis (CVP)	947					
Oroville	2,520	Shasta	3,088					
		Folsom	409					
	Delta	Operations						
DCC	Closed (since 12/1/11)	Sacramento River at Freeport (cfs)	23,748					
Outflow Index (cfs)	utflow Index (cfs) 28,500		2,190					
Total Delta Inflow (cfs)	otal Delta Inflow (cfs) 27,478							
Water Temperature (°F)		OMR 5 day (CDEC) (cfs)	-5,010					
X2 (km)	>81	OMR 14 day (CDEC) (cfs)	-4,811					
E/I (%)	30.2							

Delta Conditions: Balanced. Average turbidity is below 12 NTU at the three monitoring stations designated in the FWS BiOp. Turbidity was fairly high at both Knights Landing and Tisdale (see table). We have not seen the bulk of increased flows from the recent storm; however, when the increases reach the Delta, they should help to freshen up the water. No storms are predicted over the next 2 weeks. Water-year classification based on the Sacramento River Valley Index is "below normal" as of 1/1/12, and that for the San Joaquin River Valley is "critically dry." The high reservoir carryover from last year will be helpful in dealing with the low inflows this year. The Feather River watershed received 7–8 inches of precipitation this past weekend. Inflow (not storage) at New Melones and Millerton Reservoirs is 89% and 95% of average, respectively, vs. that at Shasta (54%) and Folsom (51%).

Weather Forecast: The remainder of January is projected to continue to be dry with less than 70% of average precipitation.

Annual Review Response: The DOSS subgroup has not yet met regarding the review of the recommendations.

Action Item: Oppenheim will send out possible meeting dates.

Adjustments to RPA: Members were asked whether they had any ideas about adjustments to the RPA. Some changes to the fish-density triggers were mentioned. The 2.5 fish/TAF loss density is the same in both the first and second stages of the RPA Action IV.2.3. The easiest "fix" is to remove the minimum 2.5 fish/TAF listed in the second stage trigger (discussed last

week), but that would leave the JPE-based density trigger for the second stage, which would likely be very low this year and might not meet the intent of the second state trigger. The second-stage JPE-based density triggers are twice those of the first stage, so it would make sense that the minimum second stage trigger should be double the density of the first stage, or 5.0 fish/TAF, and would trigger the OMR response of no more negative than -2,500 cfs. This would be consistent with how the JPE-based density triggers are written. DOSS decided to advise NMFS and WOMT of the clarification.

JPE: NMFS is still working on the JPE letter to Reclamation that is likely to be issued later this week. The draft is being reviewed right now. A draft was also sent to Llaban (DWR) and Israel (Reclamation) for comment because both were part of the JPE subgroup. The JPE is really low this year; it is about one-half of last year's. The IEP winter-run project work team proposed adding a through-Delta survival term, however, this would change the definition of the JPE as it is currently calculated only to the Delta.

Technical Workshops: There are two technical workshops scheduled for February 2012 to implement part of the joint stipulation.

- 1) February 3, 2012: An acoustic telemetry workshop led by Israel will be held at the DWR building in West Sacramento from 1:00 to 4:00 p.m. All DOSS members are invited to participate. Reclamation and DWR will fund new acoustic studies in the South Delta this year as part of the joint stipulation. DOSS will need to eventually review these proposed new studies.
- 2) February 7, 2012: A workshop will be held to "review data availability, modeling tools, and outputs and other scientific approaches for establishing real-time operations screening criteria for OMR parameter selection within the specific ranges." The planning committee held a meeting yesterday to go over ideas on the structure of the workshop. The committee has not yet seen a final participant list but understands that the information and an invitation will be sent out to DOSS and other outside experts and those involved in the joint stipulation. It is possible that stakeholders would be allowed to attend. The joint stipulation also mentions outside experts who would contribute; therefore, we would expect that it would be open to the public. Reclamation, DWR, and NMFS would decide who to invite. If there are suggestions about others who should be there, members should send that information to James Gleim (DWR) and Barb Byrne (NMFS); however, they will defer to Reclamation, DWR, and NMFS on the final invite list.

Coleman NFH: Reported that there was an accident when releasing the second spring-run surrogates at the hatchery on 1/20/12. A pipe broke when the fish were being released into Battle Creek and most of the fish ended up in the gravel. Although hatchery employees reported that about 2/3 of the fish were lost (~40,000), they recommended DOSS assume that "none" made it into the water. It would be very surprising if any fish from this release showed up at the salvage facilities; therefore, DOSS now has only one spring-run surrogate release in January (on the 13th) to monitor. DWR will still list the release on 1/20 for tracking purposes.

2011 B2 Accounting Summary: Tomorrow at CALFED Ops meeting.

Smelt Working Group (SWG): No advice.

DOSS advice to WOMT and NMFS: Clarification on the triggers in Action IV.2.3 (OMR flow management action). The 2.5 fish/TAF minimum fish density in the second-stage density trigger will change to 5.0 fish/TAF.

Next Meeting: January 31, 2012, at 9:00 a.m.